

AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Currently Amended) A dispersed pulse vector generator used for a speech coder/decoder, comprising:

a pulse vector generator configured to generate a pulse vector having a signed unit pulse;

a dispersion pattern storage configured to store a plurality of fixed dispersion patterns;

a dispersion pattern selector configured to determine a selected dispersion pattern of the plurality of fixed dispersion patterns with reference to an adaptive codebook gain; and

a dispersed pulse vector generator configured to generate a dispersed pulse vector by convoluting the pulse vector and the selected dispersion pattern;

the dispersion pattern selector comprising;

a first selector that pre-selects dispersion patterns of the plurality of fixed dispersion patterns; and

a second selector that determines the selected dispersion pattern, of the pre-selected dispersion patterns, to be convoluted with the pulse vector.

3. (Cancelled)

4. (Previously Presented) The dispersed pulse vector generator of claim 2, wherein the pulse vector is generated based on an algebraic codebook table.

5. (Previously Presented) The dispersed pulse vector generator of claim 2, wherein the plurality of fixed dispersion patterns stored in the dispersion pattern

storage are sorted into plural types according to characteristics of each of the plurality of fixed dispersion patterns.

6. (Previously Presented) The dispersed pulse vector generator of claim of claim 5, wherein the plural types comprise a first type comprising pulse shape-like dispersion patterns and a second type comprising random shape-like dispersion patterns.

7. (Currently Amended) ~~The A~~ method of generating a dispersed pulse vector used for a speech coder/decoder comprising:

providing a pulse vector having a signed unit pulse;

storing a plurality of fixed dispersion patterns;

selecting a dispersion pattern of the plurality of fixed dispersion patterns with reference to an adaptive codebook gain;

generating a dispersed pulse vector by convoluting the pulse vector and the selected dispersion pattern;

wherein the selecting further comprises;

pre-selecting dispersion patterns of the plurality of fixed dispersion patterns; and

determining the dispersion pattern, of the pre-selected dispersion patterns, to be convoluted with the pulse vector.

8. (Cancelled)

9. (Previously Presented) The method of generating a dispersed pulse vector used for a speech coder/decoder of claim 7,

wherein the pulse vector is provided based on an algebraic codebook table.

10. (Previously Presented) The method of generating a dispersed pulse vector used for a speech coder/decoder of claim 7,

wherein the plurality of stored dispersion patterns are sorted into plural types according to characteristics of each of the plurality of fixed dispersion patterns.

11. (Previously Presented) The method of generating a dispersed pulse vector used for speech coder/decoder of claim 10,

wherein the plural types comprise a first type comprising pulse shape-like dispersion patterns and a second type comprising random shape-like dispersion patterns.

12. (Currently Amended) A method of generating a dispersed pulse vector used for a speech coder/decoder comprising:

providing a pulse vector having a signed unit pulse;

pre-selecting dispersion patterns of a plurality of stored fixed dispersion patterns;

selecting ~~one of the~~ a dispersion ~~patterns~~ pattern of the pre-selected dispersion patterns with reference to an adaptive codebook gain; and

generating a dispersed pulse vector by convoluting the pulse vector and the selected ~~dispersions~~ dispersion pattern.

13. (Cancelled)

14. (Previously Presented) The method of generating a dispersed pulse vector used for a speech coder/decoder of claim 12,

wherein the pulse vector is provided based on an algebraic codebook table.

15. (Previously Presented) The method of generating a dispersed pulse vector used for a speech coder/decoder of claim 12,

wherein the plurality of stored fixed dispersion patterns are sorted into plural types according to characteristics of each of the plurality of fixed dispersion patterns.

16. (Previously Presented) The method of generating a dispersed pulse vector used for a speech coder/decoder of claim 15,

wherein the plural types comprise a first type comprising pulse shape-like dispersion patterns and a second type comprising random shape-like dispersion patterns.